

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Jeffrey R. Sampson, Gary B. Gordon, Kevin J. Luebke, and Joel Myerson

Serial No.: 09/915,044

Examiner:

Filing Date: Jul. 24, 2001

Group Art Unit:

Title: Methods for Detecting A Target Molecule

COMMISSIONER FOR PATENTS
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e), and
☐ a petition under 37 CFR 1.97(d)(2), and
☐ a \$130.00 petition fee set forth in 37 CFR 1.17(i).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge to Deposit Account **50-1078** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **50-1078** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit: Sep. 25, 2001

Typed Name: **Theodore J. Leitereg**

Signature: *Theodore J. Leitereg*

Respectfully submitted,

Jeffrey R. Sampson, Gary B. Gordon,

By *Theodore J. Leitereg*

Theodore J. Leitereg

Attorney/Agent for Applicant(s)

Reg. No. **28,319**

Date: Sep. 25, 2001

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

10980920-1

SERIAL NO.

09/915,044

APPLICANT

Sampson, J. R., et al.

FILING DATE

Jul. 24, 2001

GROUP

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	1A	4,704,353	Nov. 3, 1987	Humphries et al.	435	4
	1B	4,794,089	Dec. 27, 1988	Mroczkowski et al.	436	501
	1C	4,936,956	Jun. 26, 1990	Wrighton	204	153.21
	1D	4,994,373	Feb., 19, 1991	Stavrianopoulos et al.	435	6
	1E	5,149,629	Sep. 22, 1992	Rishpon et al.	435	7.9
	1F	5,164,319	Nov. 17, 1992	Hafeman et al.	435	291
	1G	5,223,117	Jun. 29, 1993	Wrighton et al.	204	4155,31
	1H	5,312,527	May 17, 1994	Mikkelsen et al.	204	153.12
	1I	5,312,590	May 17, 1994	Gunasingham	422	56
	1J	5,403,451	Apr. 4, 1995	Riviello et al.	204	153.1
	1K	5,413,690	May 9, 1995	Kost et al.	204	403

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
	1L	WO 96/07917	Mar. 14, 1996	Heller et al.				X
	1M	WO 97/12030	Apr. 3, 1997	Heller et al.				X
	1N	WO 98/01758	Jan. 15, 1998	Kovacs				X
	1O							
	1P							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

1Q	McAdams, et al., Science. 269: 650-656; (1995); "Circuit Simulation of Genetic Networks".
1R	Gross, et al., Biosensors & Bioelectronics. 10: 553-567; (1995); "The Use of Neuronal Networks on Multielectrode Arrays as Biosensors".
1S	Livache, et al., Analytical Biochemistry. 255: 188-194; (1998); "Polypyrrole DNA Chip on a Silicon Device: Example of Hepatitis C Virus Genotyping".

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	2A	5,653,939	Aug. 5, 1997	Hollis et al.	422	50
	2B	5,532,128	Jul. 2, 1996	Eggers et al.	435	16
	2C	5,534,132	Jul. 9, 1996	Vreeke et al.	205	777.5
	2D	5,534,424	Jul. 9, 1996	Uhlen et al.	435	91.2
	2E	5,545,531	Aug. 13, 1996	Rava et al.	435	6
	2F	5,567,302	Oct. 22, 1996	Song et al.	205	777.5
	2G	5,571,401	Nov. 5, 1996	Lewis et al.	205	787
	2H	5,591,578	Jan. 7, 1997	Meade et al.	435	6
	2I	5,605,662	Feb. 25, 1997	Heller et al.	422	68.1
	2J	5,607,646	Mar. 4, 1997	Okano et al.	422	101
	2K	5,632,957	May 27, 1997	Heller et al.	422	68.1

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
	2L							
	2M							
	2N							
	2O							
	2P							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

2Q	Wang, J. et al., Anal. Chemistry. Vol. 69 (24): 5200-5202; (1997); "Mismatch-Sensitive Hybridization Detection by Peptide Nucleic Acids Immobilized on a Quartz Crystal Microbalance".
2R	Livache, et al., Nucleic Acids Research. Vol. 22(15): 2915-2921; (1994); "Preparation of a DNA Matrix via an Electrochemically Directed Copolymerization of Pyrrole and Oligonucleotides Bearing a Pyrrole Group".
2S	Millan et al., Anal. Chem. 65: 2317-2323; (1993); "Sequence-Selective Biosensor for DNA Based on Electroactive Hybridization Indicators".

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	3A	5,648,727	Jul. 15, 1997	Tyberg et al.	324	677
	3B	5,670,322	Sep. 23, 1997	Eggers et al.	435	6
	3C	5,672,256	Sep. 30, 1997	Yee	204	403
	3D	5,733,729	Mar. 31, 1998	Lipshutz et al.	435	6
	3E	5,770,369	Jun. 23, 1998	Meade et al.	435	6
	3F	5,783,063	Jul. 21, 1998	Clarkson et al.	205	775
	3G	5,795,453	Aug. 18, 1998	Gilmartin	204	403
	3H	5,817,506	Oct. 6, 1998	Okano et al.	435	287.2
	3I	5,849,489	Dec. 15, 1998	Heller	435	6
	3J	5,874,046	Feb. 23, 1999	Megerle	422	68.1
	3K	5,445,934	Aug. 29, 1995	Fodor et al.	435	6

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	3L							
	3M							
	3N							
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	4A	5,728,532	Mar. 17, 1998	Ackley	435	6
	4B	5,582,701	Dec. 10, 1996	Geis et al	204	451
	4C					
	4D					
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